### NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Proposed Approval of Minor Source Operating Permit for P & J Industries, Inc. in Noble County

MSOP 113-11696, Plt ID 113-00056

Notice is hereby given that the company mentioned above, located at 1492 Gerber Street, Ligonier, IN 46767, has made application to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a permit to operate a decorative hexavalent chromium electroplating manufacturing facility, utilizing a composite mesh scrubber for control.

Notice is hereby given that there will be a period of thirty (30) days from the date of publication of this notice during which any interested person may comment on why this proposed permit should or should not be issued. Appropriate comments should be related to air quality issues, interpretation of the applicable state and federal rules, calculations made, technical issues, or the effect that the operation of this facility would have on any aggrieved individuals. A copy of the application and staff review is available for examination at the Ligonier Public Library, 300 S. Main Street, Ligonier, IN 46767 and at the Northern Regional Office, 220 West Colfax Avenue, Suite 200, South Bend, IN 46601-1634. All comments, along with supporting documentation, should be submitted in writing to the IDEM, OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015. If appropriate adverse comments concerning the <u>air</u> <u>pollution impact</u> of this proposed source are received, together with a request for a public hearing, such a hearing may be held to give further consideration to this application.

Persons not wishing to comment at this time, but wishing to receive notice of future proceedings conducted related to this action, must submit a written request to the Office of Air Management (OAM), at the above address. All interested parties of record will receive a notice of the decision on this matter and will then have 15 days after receipt of the Notice of Decision to file a petition for administrative review. Procedures for filing such a petition will be enclosed with the Notice.

Questions should be directed to Nishat Hydari, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, call (800) 451-6027, press 0 and ask for extension (3-6878), or dial (973) 575-2555, extension 3216.

Paul Dubenetzky, Chief Permits Branch Office of Air Management

NH/EVP

# MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT

### P & J Industries, Inc. 1492 Gerber Street Ligonier, Indiana 46767

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 113-11696-00056	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

#### **TABLE OF CONTENTS**

#### A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]
- A.2 Emission Units and Pollution Control Equipment Summary

#### B GENERAL CONSTRUCTION CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions
- B.3 Effective Date of the Permit [IC 13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]
- B.5 Modification to Permit [326 IAC 2]
- B.6 Minor Source Operating Permit [326 IAC 2-6.1]

#### C SOURCE OPERATION CONDITIONS

- C.1 PSD Minor Source Status [326 IAC 2-2][40 CFR 52.21]
- C.2 Preventive Maintenance Plan [326 IAC 1-6-3]
- C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]
- C.4 Inspection and Entry [326 IAC 2-7-6(2)]
- C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]
- C.6 Permit Revocation [326 IAC 2-1-9]
- C.7 Opacity [326 IAC 5-1]
- C.8 Fugitive Dust Emissions [326 IAC 6-4]
- C.9 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]
- C.10 Maintenance of Monitoring Equipment [IC 13-14-1-13]
- C.11 Monitoring Methods [326 IAC 3]

#### **Record Keeping and Reporting Requirements**

- C.12 Malfunctions Report [326 IAC 1-6-2]
- C.13 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-3]
- C.14 General Record Keeping Requirements [326 IAC 2-6.1-2]
- C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
- C.16 Annual Notification [326 IAC 2-6.1-5(a)(5)]

#### D.1 Emissions unit OPERATION CONDITIONS - Chromium electroplating operation

#### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

- D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]
- D.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]
- D.1.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]
- D.1.4 Work Practice Standards [40 CFR 63.342(f)]
- D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]
- D.1.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

#### Compliance Determination Requirements [326 IAC 2-1.1-11]

D.1.7 Performance Testing Requirements [326 IAC 2-1.1-11] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344]

#### Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-6.1-5(a)(2)] [40 CFR 63.343(c)]

P & J Industries, Inc.
Page 3 of 25
Ligonier, Indiana
MSOP 113-11696-00056

Permit Reviewer: NH/EVP

#### Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.9 Record Keeping Requirements [40 CFR 63.346]

D.1.10 Reporting Requirements [326 IAC 3-6-4(b)] [40 CFR 63.344(a)] [40 CFR 63.345] [40 CFR 63.347]

#### D.2 Emissions unit OPERATION CONDITIONS - 2.65 MMBtu Natural Gas Fired Boiler

#### **Emission Limitations and Standards**

D.2.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

D.2.2 Natural Gas Fuel

#### **Annual Notification**

Malfunction Report Ongoing Compliance Status Report

#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary Decorative Hexavalent Chromium Electroplating manufacturing facility.

Authorized Individual: Chris Judt

Source Address: 1492 Gerber Street, Ligonier, Indiana 46767 Mailing Address: 1492 Gerber Street, Ligonier, Indiana 46767

Phone Number: (219) 894-7143

SIC Code: 3471 County Location: Noble

County Status: Attainment for all criteria pollutants Source Status: Minor Source Operating Permit

Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

#### A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

One (1) Decorative Chromium Electroplating Operation consisting of:

- (a) Two (2) decorative chromium electroplating tanks, identified as DC-1 and DC-2, using a hexavalent chromium bath, equipped with a foam blanket suppressant, and exhausting to one (1) stack, identified as SC-1;
- (b) One (1) natural gas fired boiler identified as Boiler 1, with a maximum heat input rate of 2.65 million (MM) British thermal units (Btu) per hour, and exhausting through stack B-1;
- (c) One (1) natural gas fired Air Makeup Unit identified as AMU-1, with a maximum heat input rate of 4 MMBtu per hour;
- (d) One (1) natural gas fired Sludge Dryer identified as SD-1, with a maximum heat input rate of 0.45 MMBtu per hour, and exhausting through stack SD-1; and
- (e) Four (4) natural gas fired Space Heaters identified as SH-1, SH-2, SH-3 and SH-4, each with a maximum heat input rate of 0.085 MMBtu per hour, and exhausting through stacks SH-1, SH-2, SH-3 and SH-4, respectively.

Page 5 of 25 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

#### SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

#### B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

#### B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

#### B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

#### B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

#### B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.
  - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
  - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

P & J Industries, Inc.
Page 6 of 25
Ligonier, Indiana
MSOP 113-11696-00056

Permit Reviewer: NH/EVP

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

(e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

#### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of any criteria pollutant is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

#### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions:
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

#### C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Page 8 of 25 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

(c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

#### C.4 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

Page 9 of 25 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

#### C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

#### C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### **Testing Requirements**

#### C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

at least sixty (60) days before the intended test date for all chromium electroplating facilities and no later than thirty-five (35) days prior to the intended test date for all other facilities. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two (2) weeks prior to the test date.

Page 10 of 25 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

#### C.10 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour (this time frame is determined on a case by case basis) until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### **Record Keeping and Reporting Requirements**

#### C.12 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

#### C.13 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

Page 11 of 25 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

#### C.14 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit:
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;

- (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

#### C.15 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) A malfunction as described in 326 IAC 1-6-2; or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

#### C.16 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

Page 14 of 25 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

#### SECTION D.1

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]:

One (1) Decorative Chromium Electroplating Operation consisting of:

(a) Two (2) decorative chromium electroplating tanks, identified as DC-1 and DC-2, using a hexavalent chromium bath, equipped with a foam blanket suppressant, and exhausting to one (1) stack, identified as SC-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N.

D.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]

The provisions of 40 CFR 63, Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to tanks DC-1 and DC-2. A copy of this rule is attached.

D.1.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]

- (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction.
  - (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from tanks DC-1 and DC-2 by:
    - (1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed one-hundredth milligrams of total chromium per dry standard cubic meter of ventilation air (0.01 mg/dscm) [equivalent to four and four-tenths times ten raised to the power of negative six grains of total chromium per dry standard cubic foot of ventilation air (4.4x10° gr/dscf)]; or
    - (2) Not allowing the foam blanket thickness of the anodizing bath contained within the tank to be less than two and fifty-four hundredths centimeters (2.54 cm) [equivalent to one inch (1 in)] at any time during operation of tanks DC-1 and DC-2 when a foam blanket is used.

#### D.1.4 Work Practice Standards [40 CFR 63.342(f)]

The following work practice standards apply to tanks DC-1 and DC-2:

- (a) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain tanks DC-1 and DC-2, including the foam blanket suppressant, the composite mesh scrubber and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.1.6.
- (b) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.1.6.
- (c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.

Page 15 of 25 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

- (d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAM, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.
- (e) Based on the results of a determination made under paragraph (d) of this condition, IDEM, OAM may require that the Permittee make changes to the OMP required by Condition D.1.6. Revisions may be required if IDEM, OAM finds that the plan:
  - (1) Does not address a malfunction or period of excess emissions that has occurred;
  - (2) Fails to provide for the operation of tanks DC-1 and DC-2, the foam blanket suppressant, or the composite mesh scrubber and process monitoring equipment during a malfunction or period of excess emissions in a manner consistent with good air pollution control practices; or
  - (3) Does not provide adequate procedures for correcting malfunctioning process equipment, foam blanket suppressant, monitoring equipment or other causes of excess emissions as quickly as practicable.

#### D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan (PMP), in accordance with Section B-Preventive Maintenance Plan, of this permit, is required for tanks DC-1 and DC-2 and the composite mesh scrubber.

#### D.1.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

- (a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of tanks DC-1 and DC-2. The OMP shall specify the operation and maintenance criteria for tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh scrubber and monitoring equipment and shall include the following elements:
  - (1) Manufacturers recommendations for maintenance of the monitoring equipment used to measure surface tension;
  - (2) A standardized checklist to document the operation and maintenance criteria for tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh scrubber and the monitoring equipment.
  - (3) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur.
  - (4) A systematic procedure for identifying malfunctions and periods of excess emissions of tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh scrubber and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.
- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.1.5, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.1.6(a).
- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh scrubber and the monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.

P & J Industries, Inc.
Page 16 of 25
Ligonier, Indiana
MSOP 113-11696-00056

Permit Reviewer: NH/EVP

(d) If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAM.

(e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAM for the life of tanks DC-1 and DC-2 or until the tanks are no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAM for a period of five (5) years after each revision to the plan.

#### Compliance Determination Requirements [326 IAC 2-1.1-11]

#### D.1.7 Performance Testing [326 IAC 2-1.1-11] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR 63.344]

(a) A performance test demonstrating initial compliance for tank DC-1 was performed on July 1, 1997 and a performance test demonstrating initial compliance for tank DC-2 was performed on February 1, 1998.

During the initial performance test, it was determined that the surface tension of the bath, using Method 306B, Appendix A of 40 CFR 63, was 45 dynes/cm (for tanks DC-1 and DC-2).

- (b) The Permittee is not required to further test tanks DC-1 and DC-2 by this permit. However, the IDEM may require testing when necessary to determine if the tanks DC-1 and DC-2 are in compliance. If testing is required by IDEM, compliance with the limits specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with 40 CFR 63.344 and Section C Performance Testing.
- (c) Any change, modification, or reconstruction of tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh pad scrubber or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

#### D.1.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-6.1-5(a)(2)]

- (a) Pursuant to 40 CFR 63.343(c)(6)(ii) and (iii), when using a foam blanket in the electroplating bath to comply with the limits specified in Condition D.1.3, the Permittee shall monitor the foam blanket thickness of the electroplating bath. Operation of tanks DC-1 and DC-2 at a foam blanket thickness less than the value established during the performance test shall constitute noncompliance with the standards.
  - (1) The Permittee shall monitor the foam blanket thickness of the electroplating bath during tank operation according to the following schedule:
    - (A) The foam blanket thickness shall be measured once every hour during tank operation.
    - (B) The time between monitoring can be increased if there have been no exceedances. The foam blanket thickness shall be measured once every hour of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 4 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 8 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 8 hours of tank operation.

- (C) Once an exceedance occurs as indicated through foam blanket thickness monitoring, the original monitoring schedule of once every hour must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (B) above. For example, if a Permittee had been monitoring a tank once every 8 hours and an exceedance occurs, subsequent monitoring would take place once every hour of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 4 hours of tank operation on this schedule, monitoring can occur once every 8 hours of tank operation.
- (2) Once a bath solution is drained from tanks DC-1 and DC-2 and a new solution added, the original monitoring schedule of once every hour must be resumed, with a decrease in monitoring frequency allowed following the procedures in paragraphs (B) and (C) above.
- (b) Tank operation or operating time is defined as that time when a part is in the tank and there is a current running through the tank. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less that fifteen minutes, that time between plating the two parts is considered operating time.

#### Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.1.9 Record Keeping Requirements

The Permittee shall maintain records to document compliance with Conditions D.1.3, D.1.4 and D.1.6 using the forms provided with this permit. These records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and include a minimum of the following:

- (a) Inspection records for the foam blanket suppressant, the composite mesh scrubber system and monitoring equipment to document that the inspection and maintenance required by Conditions D.1.7 and D.1.8 have taken place. The record can take the form of a checklist and should identify the following:
  - (1) The device inspected;
  - (2) The date of inspection;
  - (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
  - (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on tanks DC-1 and DC-2, the composite mesh scrubber and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction of tanks DC-1 and DC-2, the composite mesh scrubber and monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tanks DC-1 and DC-2, the composite mesh scrubber and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.

P & J Industries, Inc.
Page 18 of 25
Ligonier, Indiana
MSOP 113-11696-00056

Permit Reviewer: NH/EVP

(g) Test reports documenting results of all performance tests.

- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.1.8(b), of each tank, during the reporting period.
- (k) Records of the date and time that fume suppressants were added to the electroplating bath, and the amount and type of fume suppressant added.
- (I) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.1.10.

#### D.1.10 Reporting Requirements [326 IAC 3-6-4(b)] [40 CFR 63.344(a), 63.345 and 63.347]

The notifications and reports required in this section shall be submitted to IDEM, OAM using the address specified in Section C - General Reporting Requirements.

- (a) Notifications:
  - (1) Initial Notifications
    The Permittee shall notify IDEM, OAM in writing that the source is subject to 40 CFR Part
    63, Subpart N. The notification shall be submitted no later than one hundred eighty (180)
    days after the compliance date and shall contain the information listed in 40 CFR
    63.347(c)(1).
  - (2) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
    - (A) The NCS shall be submitted to IDEM, OAM, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
    - (B) The NCS for tanks DC-1 and DC-2 shall be submitted to IDEM, OAM no later than forty-five (45) days following completion of the compliance demonstration pursuant to Section C - Performance Testing.
  - (3) Notification of Construction or Reconstruction
    Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new tank subject to
    40 CFR 63, Subpart N (including non-affected tanks defined in 40 CFR 63.344(e)) without
    submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAM. In
    addition, the Permittee may not change, modify, or reconstruct tanks DC-1 and DC-2
    without submitting a Notification of Construction or Reconstruction (NCR) to IDEM, OAM.
    - (A) The NCR shall contain the information identified in 40 CFR 63.345(b)(2) and (3).
    - (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device [i.e., the addition of duct work to the CMP system (if a CMP system is used to demonstrate compliance with the chromium emission limitation)].
    - (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tanks DC-1 and DC-2 serves as this notification.

(D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAM before construction, modification, or reconstruction may commence.

#### (b) Ongoing Compliance Status Report

The Permittee shall prepare summary reports to document the ongoing compliance status of tanks DC-1 and DC-2 using the Ongoing Compliance Status Report form provided with this permit. This report shall contain the information specified in 40 CFR 63.347(g)(3).

Because tanks DC-1 and DC-2 are located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAM upon request.

- (1) The Ongoing Compliance Status Report shall be complete according to the following schedule except as provided in paragraphs (c)(2).
  - (A) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units begin operation.
  - (B) Following the first year of reporting, the report shall be completed on a calender year basis with the reporting period covering from January 1 to December 31.
- (2) If either of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAM:
  - (A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.8(b) for the reporting period; or
  - (B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) of greater of the total operating time as defined in Condition D.1.8(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(q)(2) is approved.

(3) IDEM, OAM may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

#### **SECTION D.2**

#### **Emissions unit OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]:

- (c) One (1) natural gas fired boiler identified as Boiler 1, with a maximum heat input rate of 2.65 million (MM) British thermal units (Btu) per hour, and exhausting through stack B-1;
- (d) One (1) natural gas fired Air Makeup Unit identified as AMU-1, with a maximum heat input rate of 4 MMBtu per hour;
- (e) One (1) natural gas fired Sludge Dryer identified as SD-1, with a maximum heat input rate of 0.45 MMBtu per hour, and exhausting through stack SD-1; and
- (f) Four (4) natural gas fired Space Heaters identified as SH-1, SH-2, SH-3 and SH-4, each with a maximum heat input rate of 0.085 MMBtu per hour, and exhausting through stacks SH-1, SH-2, SH-3 and SH-4, respectively.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### D.2.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate emission limitations for sources of indirect heating), particulate emissions from the one (1) 2.65 MMBtu/hr natural gas fired boiler used for indirect heating purposes which was constructed after September 21, 1983, shall in no case exceed 0.6 pounds of particulate matter per million British thermal units heat input.

#### D.2.2 Natural Gas Fuel

The one (1) boiler (Boiler 1) rated at 2.65 MMBtu per hour, shall use only natural gas fuel.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

### MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	P & J Industries, Ind	c.
Address:	1492 Gerber Street,	Ligonier, IN 46767
City:	Ligonier	
Phone #:	(219) 894-7143	
MSOP #:	113-11696-00056	
I hereby certify that P & 、	J Industries, Inc. is	<ul><li>9 still in operation.</li><li>9 no longer in operation.</li></ul>
I hereby certify that P & .	9 in complian	nce with the requirements of MSOP 113-11696-00056.
Authorized Individual	(typed):	
Title:		
Signature:		
Date:		
		which the source is not in compliance, provide a narrative e compliance and the date compliance was, or will be
Noncompliance:		

#### **MALFUNCTION REPORT**

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR MANAGEMENT** FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6

and to qualify for the exemption under 326 IAC 1-6-4.
THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER?, 25 TONS/YEAR SULFUR DIOXIDE?, 25 TONS/YEAR NITROGEN OXIDES?, 25 TONS/YEAR VOC?, 25 TONS/YEAR HYDROGEN SULFIDE?, 25 TONS/YEAR TOTAL REDUCED SULFUR ?, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS?, 25 TONS/YEAR FLUORIDES?, 100 TONS/YEAR CARBON MONOXIDE?, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT?, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT?, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD?, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2)? EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION
THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC OR, PERMIT CONDITION # AND/OR PERMIT LIMIT OF
THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y
THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT? Y
COMPANY:PHONE NO. ( )
COMPANY:PHONE NO. ( ) LOCATION: (CITY AND COUNTY) PERMIT NOAFS PLANT ID:AFS POINT ID:INSP: CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:
DATE/TIME MALFUNCTION STARTED:/ 20 AM / PM
ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE// 20 AM/PM
TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:
ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION:
MEASURES TAKEN TO MINIMIZE EMISSIONS:
REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:
CONTINUED OPERATION REQUIRED TO PROVIDE <u>ESSENTIAL</u> * SERVICES:
MALFUNCTION REPORTED BY:TITLE: (SIGNATURE IF FAXED)
MALFUNCTION RECORDED BY:DATE:TIME:

\*SEE PAGE 2

Page 23 of 25 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

# Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

#### 326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

#### 326 IAC 1-2-39 "Malfunction" definition

- Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.
- \*Essential services are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

#### MINOR SOURCE OPERATING PERMIT CHROMIUM ELECTROPLATING NESHAP ONGOING COMPLIANCE STATUS REPORT

(Complete this form for each affected tank)

Source Name: P & J Industries, Inc.

Source Address: 1492 Gerber Street, Ligonier, IN 46767

Mailing Address: 1492 Gerber Street, Ligonier, IN 46767

MSOP Permit No.: 113-11696-00056

Tank ID #:

Type of process: Decorative

Type of process. Decorative

Monitoring Parameter: Surface tension of the electroplating bath

Parameter Value: 45 dynes per centimeter

Limits: Total chromium concentration may not exceed 0.01 mg/dscm if the chromium

electroplating bath does not meet 45 dynes per centimeter

This form is to be used to report compliance for the Chromium Electroplating NESHAP only. The frequency for completing this report may be altered by the IDEM, OAM, Compliance Branch.

<u>Companies classified as a major source</u>: submit this report no later than 30 days after the end of the reporting period.

<u>Companies classified as an area source</u>: complete this report no later than 30 days after the end of the reporting period, and retain on site unless otherwise notified.

#### This form consists of 2 pages

Page 1 of 2

BEGINNING AND ENDING DATES OF THE REPORTING PERIOD:

TOTAL OPERATING TIME OF THE TANK DURING THE REPORTING PERIOD:

#### MAJOR AND AREA SOURCES: CHECK ONE

- 9 NO DEVIATIONS OF THE MONITORING PARAMETER ASSOCIATED WITH THIS TANK FROM THE COMPLIANT VALUE OR RANGE OF VALUES OCCURRED DURING THIS REPORTING PERIOD.
- THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES DURING THIS REPORTING PERIOD (THUS INDICATING THE EMISSION LIMITATION MAY HAVE BEEN EXCEEDED, WHICH COULD RESULT IN MORE FREQUENT REPORTING).

#### AREA (I.E., NON-MAJOR) SOURCES OF HAP ONLY:

IF DEVIATIONS OCCURRED, LIST THE AMOUNT OF TANK OPERATING TIME EACH MONTH THAT MONITORING RECORDS SHOW THE MONITORING PARAMETER DEVIATED FROM THE COMPLIANT VALUE OR RANGE OF VALUES.

JAN	APR	JUL	ОСТ
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

HARD CHROME TANKS / MAXIMUM RECTIFIER CAPACITY LIMITED IN ACCORDANCE WITH 40 CFR 63.342(c)(2) ONLY:
LIST THE ACTUAL AMPERE-HOURS CONSUMED (BASED ON AN AMP-HR METER) BY THE INDIVIDUAL TANK.

JAN	APR	JUL	ОСТ
FEB	MAY	AUG	NOV
MAR	JUN	SEP	DEC

## CHROMIUM ELECTROPLATING NESHAP ONGOING COMPLIANCE STATUS REPORT

ATTACH A SEPARATE PAGE IF NEEDED

Page 2 of 2

	NATION OF THE REASONS FO	NCE PLAN REQUIRED BY 40 CFR 63.342 (f)(3) WAS NOT FOLLOWED, OR NOT FOLLOWING THE PLAN AND DESCRIBE THE ACTIONS TAKE	
DESCRI REPOR		, RECTIFIERS, CONTROL DEVICES, MONITORING, ETC. SINCE THE	LAST STATUS
ADDITIO	DNAL COMMENTS:		
ALL SO	URCES: CHECK ONE		
9	WITH THE OPERATION AND	C PRACTICE STANDARDS IN 40 CFR 63.342(f) WERE FOLLOWED IN A D MAINTENANCE PLAN ON FILE; AND, THAT THE INFORMATION COI D TRUE TO THE BEST OF MY KNOWLEDGE.	
9	THE WORK PRACTICE STAN	NDARDS IN 40 CFR 63.342(f) WERE NOT FOLLOWED IN ACCORDAN ANCE PLAN ON FILE, AS EXPLAINED ABOVE AND/OR ON ATTACHE	CE WITH THE D.
	Submitted by: Title/Position: Signature: Date: Phone:		

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Minor Source Operating Permit

#### **Source Background and Description**

**Source Name:** P & J Industries, Inc.

**Source Location:** 1492 Gerber Street, Ligonier, IN 46767

County: Noble SIC Code: 3471

Operation Permit No.: MSOP 113-11696-00056
Permit Reviewer: Nishat Hydari / EVP

The Office of Air Management (OAM) has reviewed an application from P & J Industries, Inc. relating to the operation of a Decorative Hexavalent Chromium Electroplating manufacturing facility.

#### **Permitted Emission Units and Pollution Control Equipment**

The application includes information relating to the operation of the following equipment:

- (a) One (1) hexavalent decorative chromium electroplating operation with a 72 kilo watt (KW) rectifier, identified as DC-1, using foam blanket suppressant and a composite mesh scrubber as control and exhausting to stack SC-1. Operation of the scrubber is not required for compliance;
- (b) One (1) hexavalent chromium purifying tank with a 40 KW rectifier, identified as DC-2, using foam blanket suppressant as control and exhausting to stack SC-1. Operation of the scrubber is not required for compliance;
- (c) One (1) natural gas fired boiler identified as Boiler 1, with a maximum heat input rate of 2.65 million (MM) British thermal units (Btu) per hour, and exhausting through stack B-1;
- (d) One (1) natural gas fired Air Makeup Unit identified as AMU-1, with a maximum heat input rate of 4 MMBtu per hour;
- (e) One (1) natural gas fired Sludge Dryer identified as SD-1, with a maximum heat input rate of 0.45 MMBtu per hour, and exhausting through stack SD-1; and
- (f) Four (4) natural gas fired Space Heaters identified as SH-1, SH-2, SH-3 and SH-4, each with a maximum heat input rate of 0.085 MMBtu per hour, and exhausting through stacks SH-1, SH-2, SH-3 and SH-4, respectively.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### **Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
	Composite mesh scrubber servicing decorative hexachrome plating tank, activator tank, and stick tank (nitric acid)	23	2	8,100	75
	Exhaust system servicing other tanks (clean, rinse, etch, etc)	26	4	31,430	75
B-1	Boiler	24	1.5	1,000	400
SH-1-4	Space Heaters	23	0.5	50	250
SD-1	Sludge Dryer	23	0.75	250	200

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 27, 1999.

#### **Emission Calculations**

See Appendix A of this document for detailed natural gas emissions calculations (Appendix A, pages 1).

Chromium emissions (Single HAP) from the biggest source in Indiana is less than ten (10) tons per year and P & J Industries, Inc. is a much smaller source in comparison. So no calculations were necessary for this source because the emissions from this source will be less than ten (10) tons per year.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	0.06
PM-10	0.25
SO <sub>2</sub>	0.02
VOC	0.18
CO	2.74
NO <sub>x</sub>	3.26

HAP's	Potential To Emit (tons/year)
Chromium compounds	0.0003
TOTAL	0.0003

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The existing source is subject to 326 IAC 20-8 but not subject to 326 IAC 2-5.5-1(b)(2) (registration) because the source uses hexavalent chromium for decorative coating instead of trivalent chromium and the source emits less than major source levels (see statement (a) above). Therefore, the source is subject to the provisions of 326 IAC 2-6.1-3(a).

#### **Actual Emissions**

No previous emission data has been received from the source.

#### **Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM PM-10 SO <sub>2</sub> VOC CO NO <sub>X</sub> HAPs					
Chromium Tank	0.0	0.0	0.0	0.0	0.0	0.0	< 10.0
Total Emissions	0.0	0.0	0.0	0.0	0.0	0.0	< 25.0

#### **County Attainment Status**

The source is located in Noble County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
СО	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### **Source Status**

New Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.06
PM10	0.25
SO <sub>2</sub>	0.02
VOC	0.18
CO	2.74
NO <sub>x</sub>	3.26
Single HAP	0.0003
Combination HAPs	0.0003

(a) This new source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

#### **Federal Rule Applicability**

- (a) The one (1) natural gas fired boiler identified as Boiler 1, is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Dc), because the boiler capacity is less than 10 MMBtu per hour.
- (b) The chromium electroplating operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart N.

- (1) The surface tension of the chromium electroplating bath contained with the tank shall not exceed forty-five (45) dynes per centimeter at any time during the operation of the tank if a chemical fume suppressant containing a wetting agent is used to demonstrate compliance.
- (2) Each time that surface tension monitoring exceeds forty-five (45) dynes per centimeter, the frequency of monitoring must revert back to every four (4) hours of tank operation. After forty (40) hours of monitoring tank operation every four (4) hours with no exceedances, surface tension measurement may be conducted once every eight (8) hours of tank operation. Once there have been no exceedances during forty (40) hours of tank operation, surface tension measurement may be conducted once every forty (40) hours of tank operation on an ongoing basis, until an exceedance occurs.

- (3) An alternative emission limit of 0.01 milligram per day standard cubic meter (mg/dscm) will be applicable if the chromium electroplating bath does not meet the limit above.
- (4) A summary report shall be prepared to document the ongoing compliance status of the chromium electroplating operation. This report shall be completed annually, retained on site, and made available to IDEM upon request. If there are significant exceedance of chromium air emission limits (as defined in 40 CFR Part 63.347(h)(2)), then semiannual reports shall be submitted to:

Indiana Department of Environmental Management Air Compliance Branch, Office of Air Management Chromium Electroplating 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206

(5) The chromium electroplating operations shall be subject to the record keeping and reporting requirement as indicated in the chromium electroplating NESHAP.

#### State Rule Applicability - Entire Source

#### 326 IAC 2-6 (Emission Reporting)

This source is located in Noble County and the potential to emit of any of the criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The 2.65 MMBtu/hr natural gas fired boiler was constructed after September 21, 1983 and, pursuant to 326 IAC 6-2-4, is subject to a default particulate matter emission limit of 0.6 pounds per million (MM) Btu of heat input. The source will comply with this limit through the use of natural gas fuel.

#### Conclusion

The operation of this Decorative Hexavalent Chromium Electroplating manufacturing facility shall be subject to the conditions of the attached proposed **Minor Source Operating Permit 113-11696-00056**.

## Indiana Department of Environmental Management Office of Air Management

## Addendum to the Technical Support Document for a Minor Source Operating Permit (MSOP)

Source Name: P & J Industries, Inc.

Source Location: 1492 Gerber Street, Ligonier, IN 46767

County: Noble

Operation Permit No.: MSOP 113-11696-00056

SIC Code: 3471

Permit Reviewer: Nishat Hydari/EVP

On February 28, 2000, the Office of Air Management (OAM) had a notice published in News-Sun, Kendallville, Indiana, stating that P & J Industries, Inc. had applied for a Minor Source Operating Permit (MSOP) to operate a Decorative Hexavalent Chromium Electroplating manufacturing facility. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

No comments were submitted by P & J Industries, Inc.

Upon further review, the OAM has decided to make the following revisions to the permit to incorporate updated language for decorative chromium electroplating operations (**bolded** language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

#### A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) One (1) hexavalent decorative chromium electroplating operation with a 72 kilo watt (KW) rectifier, identified as DC-1, using foam blanket suppressant and a composite mesh scrubber as control and exhausting to stack SC-1. Operation of the scrubber is not required for compliance;
- (b) One (1) hexavalent chromium purifying tank with a 40 KW rectifier, identified as DC-2, using foam blanket suppressant as control and exhausting to stack SC-1. Operation of the scrubber is not required for compliance;

#### One (1) Decorative Chromium Electroplating Operation consisting of:

- (a) Two (2) decorative chromium electroplating tanks, identified as DC-1 and DC-2, using a hexavalent chromium bath, equipped with a foam blanket suppressant, and exhausting to one (1) stack, identified as SC-1;
- (eb) One (1) natural gas fired boiler identified as Boiler 1, with a maximum heat input rate of 2.65 million (MM) British thermal units (Btu) per hour, and exhausting through stack B-1;
- (dc) One (1) natural gas fired Air Makeup Unit identified as AMU-1, with a maximum heat input rate of 4 MMBtu per hour;

- (ed) One (1) natural gas fired Sludge Dryer identified as SD-1, with a maximum heat input rate of 0.45 MMBtu per hour, and exhausting through stack SD-1; and
- (fe) Four (4) natural gas fired Space Heaters identified as SH-1, SH-2, SH-3 and SH-4, each with a maximum heat input rate of 0.085 MMBtu per hour, and exhausting through stacks SH-1, SH-2, SH-3 and SH-4, respectively.

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]:

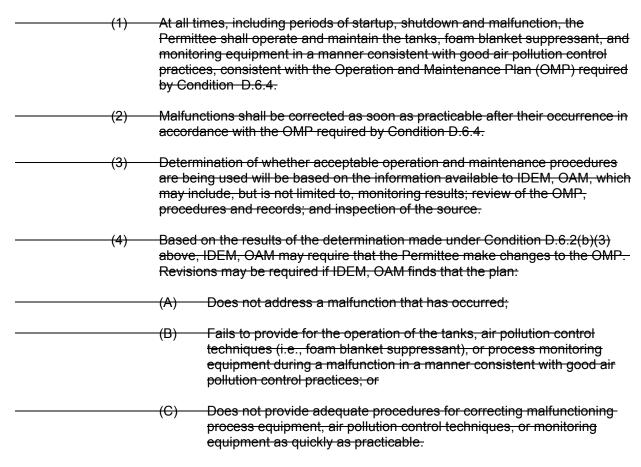
- (a) One (1) hexavalent decorative chromium electroplating operation with a 72 kilo watt (KW) rectifier, identified as DC-1, using foam blanket suppressant and a composite mesh scrubber as control and exhausting to stack SC-1. Operation of the scrubber is not required for compliance; and
- (b) One (1) hexavalent chromium purifying tank with a 40 KW rectifier, identified as DC-2, using foam blanket suppressant as control and exhausting to stack SC-1. Operation of the scrubber is not required for compliance.
- One (1) Decorative Chromium Electroplating Operation consisting of:
- (a) Two (2) decorative chromium electroplating tanks, identified as DC-1 and DC-2, using a hexavalent chromium bath, equipped with a foam blanket suppressant, and exhausting to one (1) stack, identified as SC-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

- D.1.1 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR Part 63, Subpart A]
  The provisions of 40 CFR Part 63, Subpart A General Provisions, which are incorporated by reference as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart N.
- D.1.2 Chromium Electroplating NESHAP [326 IAC 20-8-1][40 CFR Part 63, Subpart N]

  This facility is subject to 40 CFR Part 63, Subpart N, which is incorporated by reference as 326 IAC 20-8-1. A copy of this rule is attached.
- (a) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from DC-1 and DC-2 by not allowing the surface tension of the electroplating bath contained within each tank to exceed forty-five (45) dynes per centimeter (dynes/cm) (3.1 x 10-3 pound-force per foot [lbf/ft]) at any time during operation of the tanks.
  - Pursuant to 40 CFR 63.343(c)(5)(i), the Permittee has accepted 45 dynes/cm as the maximum surface tension value that corresponds to compliance with the applicable emission limitation, 0.01 mg/dscm (4.4 x 10-6 gr/dscf) in lieu of establishing the maximum surface tension during an initial performance test.
  - (b) The following work practice standards for the tanks are also applicable:



### D.1.2 Chromium Electroplating and Anodizing NESHAP [326 IAC 20-8-1] [40 CFR Part 63, Subpart N]

The provisions of 40 CFR 63, Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, which are incorporated by reference as 326 IAC 20-8-1, apply to tanks DC-1 and DC-2. A copy of this rule is attached.

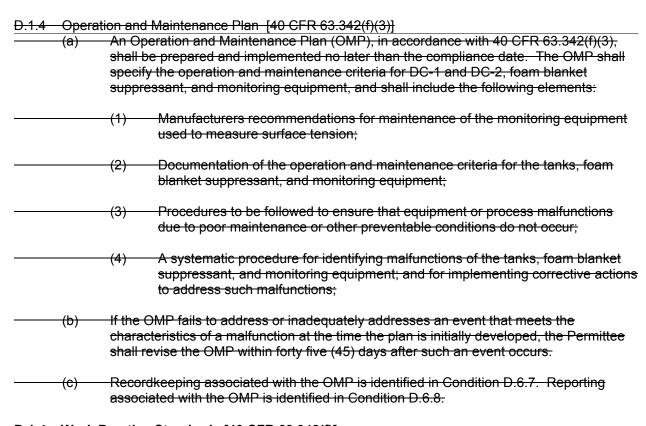
#### D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan (PMP), in accordance with Section B.13 - Preventive Maintenance Plan, of this permit, is required for DC-1 and DC-2.

#### D.1.3 Chromium Emissions Limitation [40 CFR 63.342(c)] [40 CFR 63.343(a)(1)&(2)]

- (a) The emission limitations in this condition apply only during tank operation, and also apply during periods of startup and shutdown as these are routine occurrences for tanks subject to 326 IAC 20-8-1. The emission limitations do not apply during periods of malfunction.
- (b) During tank operation, the Permittee shall control chromium emissions discharged to the atmosphere from tanks DC-1 and DC-2 by:

- (1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed one-hundredth milligrams of total chromium per dry standard cubic meter of ventilation air (0.01 mg/dscm) [equivalent to four and four-tenths times ten raised to the power of negative six grains of total chromium per dry standard cubic foot of ventilation air (4.4x10-6 gr/dscf)]; or
- (2) Not allowing the foam blanket thickness of the anodizing bath contained within the tank to be less than two and fifty-four hundredths centimeters (2.54 cm) [equivalent to one inch (1 in)] at any time during operation of tanks DC-1 and DC-2 when a foam blanket is used.



#### D.1.4 Work Practice Standards [40 CFR 63.342(f)]

The following work practice standards apply to tanks DC-1 and DC-2:

(a) At all times, including periods of startup, shutdown, malfunction and excess emissions, the Permittee shall operate and maintain tanks DC-1 and DC-2, including the foam blanket suppressant, the composite mesh scrubber and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the Operation and Maintenance Plan (OMP) required by Condition D.1.6.

- (b) Malfunctions and excess emissions shall be corrected as soon as practicable after their occurrence in accordance with the OMP required by Condition D.1.6.
- (c) These operation and maintenance requirements are enforceable independent of emissions limitations or other requirements in this section.
- (d) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to IDEM, OAM, which may include, but is not limited to, monitoring results; review of the OMP, procedures, and records; and inspection of the source.
- (e) Based on the results of a determination made under paragraph (d) of this condition, IDEM, OAM may require that the Permittee make changes to the OMP required by Condition D.1.6. Revisions may be required if IDEM, OAM finds that the plan:
  - (1) Does not address a malfunction or period of excess emissions that has occurred;
  - (2) Fails to provide for the operation of tanks DC-1 and DC-2, the foam blanket suppressant, or the composite mesh scrubber and process monitoring equipment during a malfunction or period of excess emissions in a manner consistent with good air pollution control practices; or
  - (3) Does not provide adequate procedures for correcting malfunctioning process equipment, foam blanket suppressant, monitoring equipment or other causes of excess emissions as quickly as practicable.

#### Compliance Determination Requirements [326 IAC 2-1.1-11]

#### D.1.5 Testing Requirements [326 IAC 2-1.1-11]

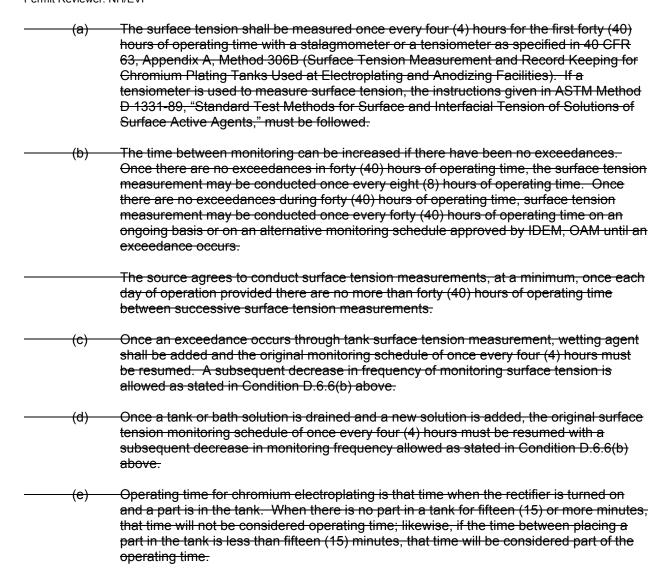
The Permittee is not required to test this facility by this permit. However, IDEM, OAM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required, compliance with the emission limit of 0.01 milligrams per dry standard cubic meter shall be determined by a performance test conducted in accordance with the provisions of 40 CFR 63.344.

#### D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan (PMP), in accordance with Section B-Preventive Maintenance Plan, of this permit, is required for tanks DC-1 and DC-2 and the composite mesh scrubber.

#### D.1.6 Monitoring to Demonstrate Continuous Compliance [40 CFR 63.343 (c)(5) & (7)]

The Permittee shall monitor the surface tension of the electroplating baths in DC-1 and DC-2. Operation of either tank at a surface tension of greater than 45 dynes per centimeter shall constitute noncompliance with the standards. The surface tension of each tank in operation shall be monitored according to the following schedule:



## D.1.6 Operation and Maintenance Plan [40 CFR 63.342(f)(3)]

- (a) The Permittee shall prepare an Operation and Maintenance Plan (OMP) to be implemented no later than the startup date of tanks DC-1 and DC-2. The OMP shall specify the operation and maintenance criteria for tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh scrubber and monitoring equipment and shall include the following elements:
  - (1) Manufacturers recommendations for maintenance of the monitoring equipment used to measure surface tension;
  - (2) A standardized checklist to document the operation and maintenance criteria for tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh scrubber and the monitoring equipment.

- (3) Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions or periods of excess emissions as indicated by monitoring data do not occur.
- (4) A systematic procedure for identifying malfunctions and periods of excess emissions of tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh scrubber and monitoring equipment; and for implementing corrective actions to address such malfunctions and periods of excess emissions.
- (b) The Permittee may use applicable standard operating procedures (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans such as the PMP required in Condition D.1.5, as the OMP, provided the alternative plans meet the above listed criteria in Condition D.1.6(a).
- (c) If the OMP fails to address or inadequately addresses an event that meets the characteristics of a malfunction or period of excess emissions at the time the plan is initially developed, the Permittee shall revise the OMP within forty-five (45) days after such an event occurs. The revised plan shall include procedures for operating and maintaining tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh scrubber and the monitoring equipment, during similar malfunction or period of excess emissions events, and a program for corrective action for such events.
- (d) If actions taken by the Permittee during periods of malfunction or period of excess emissions are inconsistent with the procedures specified in the OMP, the Permittee shall record the actions taken for that event and shall report by phone such actions within two (2) working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within seven (7) working days after the end of the event, unless the Permittee makes alternative reporting arrangements, in advance, with IDEM, OAM.
- (e) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAM for the life of tanks DC-1 and DC-2 or until the tanks are no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMPs on record to be made available for inspection, upon request by IDEM, OAM for a period of five (5) years after each revision to the plan.

Compliance Determination Requirements [326 IAC 2-1.1-11]

## D.1.7 Performance Testing [326 IAC 2-1.1-11] [40 CFR 63.343(b)(2)] [40 CFR 63.7] [40 CFR

(a) A performance test demonstrating initial compliance for tank DC-1 was performed on July 1, 1997 and a performance test demonstrating initial compliance for tank DC-2 was performed on February 1, 1998.

During the initial performance test, it was determined that the surface tension of the bath, using Method 306B, Appendix A of 40 CFR 63, was 45 dynes/cm (for tanks DC-1 and DC-2).

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

- (b) The Permittee is not required to further test tanks DC-1 and DC-2 by this permit. However, the IDEM may require testing when necessary to determine if the tanks DC-1 and DC-2 are in compliance. If testing is required by IDEM, compliance with the limits specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with 40 CFR 63.344 and Section C Performance Testing.
- (c) Any change, modification, or reconstruction of tanks DC-1 and DC-2, the foam blanket suppressant, the composite mesh pad scrubber or monitoring equipment may require additional performance testing conducted in accordance with 40 CFR 63.344 and Section C Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

## D.1.8 Monitoring to Demonstrate Continuous Compliance [326 IAC 2-6.1-5(a)(2)]

- (a) Pursuant to 40 CFR 63.343(c)(6)(ii) and (iii), when using a foam blanket in the electroplating bath to comply with the limits specified in Condition D.1.3, the Permittee shall monitor the foam blanket thickness of the electroplating bath. Operation of tanks DC-1 and DC-2 at a foam blanket thickness less than the value established during the performance test shall constitute noncompliance with the standards.
  - (1) The Permittee shall monitor the foam blanket thickness of the electroplating bath during tank operation according to the following schedule:
    - (A) The foam blanket thickness shall be measured once every hour during tank operation.
    - (B) The time between monitoring can be increased if there have been no exceedances. The foam blanket thickness shall be measured once every hour of tank operation for the first 40 hours of tank operation after the compliance date. Once there are no exceedances during 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 4 hours of tank operation. Once there are no exceedances during 40 hours of tank operation, foam blanket thickness measurement may be conducted once every 8 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed by this subpart is once every 8 hours of tank operation.

- (C) Once an exceedance occurs as indicated through foam blanket thickness monitoring, the original monitoring schedule of once every hour must be resumed. A subsequent decrease in frequency shall follow the schedule laid out in paragraph (B) above. For example, if a Permittee had been monitoring a tank once every 8 hours and an exceedance occurs, subsequent monitoring would take place once every hour of tank operation. Once an exceedance does not occur for 40 hours of tank operation, monitoring can occur once every 4 hours of tank operation on this schedule, monitoring can occur once every 8 hours of tank operation.
- (2) Once a bath solution is drained from tanks DC-1 and DC-2 and a new solution added, the original monitoring schedule of once every hour must be resumed, with a decrease in monitoring frequency allowed following the procedures in paragraphs (B) and (C) above.
- (b) Tank operation or operating time is defined as that time when a part is in the tank and there is a current running through the tank. If the amount of time that no part is in the tank is fifteen minutes or longer, that time is not considered operating time. Likewise, if the amount of time between placing parts in the tank (i.e., when no part is in the tank) is less that fifteen minutes, that time between plating the two parts is considered operating time.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.7		Keeping Requirements [40 CFR 63.346]				
	<del>(a)</del>	The Permittee shall maintain records to document compliance with Conditions D.6.2 and D.6.4 using the forms provided with this permit. These records shall be maintained in accordance with the Section C condition entitled "General Record Keeping Requirements" of this permit, be kept for a period of five (5) years, and include a minimum of the following:				
		<del>(1)</del>	Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard, i.e., surface tension of the bath in each tank, including the date and time the data are collected. If a tensiometer is used to measure surface tension, a copy of ASTM Method D 1331-89, "Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface Active Agents," must be included with the log book containing surface tension measurements.			
		(2)	The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs.			
		(3)	The total process operating time of each tank, not both combined, during the reporting period.			
		(4)	Records of the date, time, and amount of foam blanket suppressants added to the electroplating bath(s).			

(5) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.6.8.

(b) The Permittee shall keep the written OMP on record after it is developed to be made available, upon request, by IDEM, OAM for the life of the tanks or until the tanks are no longer subject to the provisions of 40 CFR 63.340. In addition, if the OMP is revised, the Permittee shall keep previous versions of the OMP on record to be made available for inspection, upon request by IDEM, OAM for a period of five (5) years after each revision to the plan.

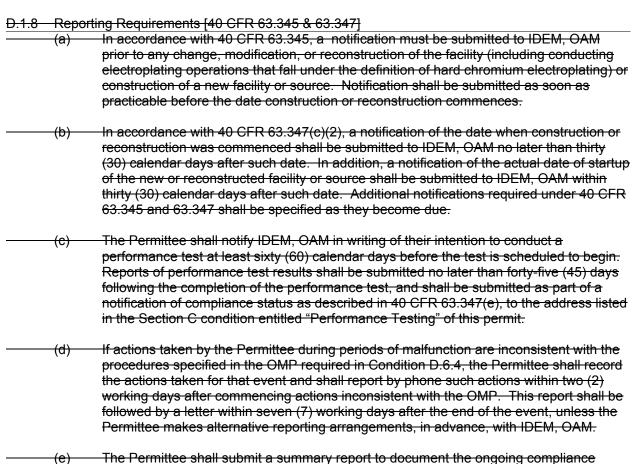
#### D.1.9 Record Keeping Requirements

The Permittee shall maintain records to document compliance with Conditions D.1.3, D.1.4 and D.1.6 using the forms provided with this permit. These records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit and include a minimum of the following:

- (a) Inspection records for the foam blanket suppressant, the composite mesh scrubber system and monitoring equipment to document that the inspection and maintenance required by Conditions D.1.7 and D.1.8 have taken place. The record can take the form of a checklist and should identify the following:
  - (1) The device inspected;
  - (2) The date of inspection;
  - (3) A brief description of the working condition of the device during the inspection, including any deficiencies found; and
  - (4) Any actions taken to correct deficiencies found during the inspection, including the date(s) such actions were taken.
- (b) Records of all maintenance performed on tanks DC-1 and DC-2, the composite mesh scrubber and monitoring equipment.
- (c) Records of the occurrence, duration, and cause (if known) of each malfunction of tanks DC-1 and DC-2, the composite mesh scrubber and monitoring equipment.
- (d) Records of the occurrence, duration, and cause (if known) of each period of excess emissions of tanks DC-1 and DC-2, the composite mesh scrubber and monitoring equipment as indicated by monitoring data collected in accordance with this condition.
- (e) Records of actions taken during periods of malfunction or excess emissions when such actions are inconsistent with the OMP.
- (f) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the OMP.
- (g) Test reports documenting results of all performance tests.

applicable.

- (h) All measurements as may be necessary to determine the conditions of performance tests, including measurements necessary to determine compliance.
- (i) Records of monitoring data required by 40 CFR 63.343(c) that are used to demonstrate compliance with the standard including the date and time the data are collected.
- (j) The total process operating time, as defined in Condition D.1.8(b), of each tank, during the reporting period.
- (k) Records of the date and time that fume suppressants were added to the electroplating bath, and the amount and type of fume suppressant added.
- (I) All documentation supporting the notifications and reports required by 40 CFR 63.9 and 63.10 (Subpart A, General Provisions) and by Condition D.1.10.



status of the facility using the Ongoing Compliance Status Report form provided with this permit. The report shall contain the information specified in 40 CFR 63.347(g)(3) that is

- (1) This report shall be submitted semiannually on a calendar year basis, unless otherwise directed by IDEM, OAM. The report shall be submitted within thirty (30) days after the end of each reporting period, which ends June 30 and December 31 respectively.
  - (2) If the monitoring data collected by the Permittee in accordance with Condition D.6.6 show that the emission limit has been exceeded, quarterly reports shall be submitted. Once the Permittee reports an exceedance, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency, according to the procedures of 40 CFR 63.347(g)(2), is approved.

# D.1.10 Reporting Requirements [326 IAC 3-6-4(b)] [40 CFR 63.344(a), 63.345 and 63.347] The notifications and reports required in this section shall be submitted to IDEM, OAM using the address specified in Section C - General Reporting Requirements.

## (a) Notifications:

- (1) Initial Notifications
  The Permittee shall notify IDEM, OAM in writing that the source is subject to 40 CFR Part 63, Subpart N. The notification shall be submitted no later than one hundred eighty (180) days after the compliance date and shall contain the information listed in 40 CFR 63.347(c)(1).
- (2) A Notification of Compliance Status (NCS) is required each time that the facility becomes subject to the requirements of 40 CFR Part 63 Subpart N.
  - (A) The NCS shall be submitted to IDEM, OAM, and shall list, for each tank, the information identified in 40 CFR 63.347(e)(2).
  - (B) The NCS for tanks DC-1 and DC-2 shall be submitted to IDEM, OAM no later than forty-five (45) days following completion of the compliance demonstration pursuant to Section C Performance Testing.
- (3) Notification of Construction or Reconstruction
  Pursuant to 40 CFR 63.345(b)(1), the Permittee may not construct a new
  tank subject to 40 CFR 63, Subpart N (including non-affected tanks defined
  in 40 CFR 63.344(e)) without submitting a Notification of Construction or
  Reconstruction (NCR) to IDEM, OAM. In addition, the Permittee may not
  change, modify, or reconstruct tanks DC-1 and DC-2 without submitting a
  Notification of Construction or Reconstruction (NCR) to IDEM, OAM.
  - (A) The NCR shall contain the information identified in 40 CFR 63.345(b)(2) and (3).

- (B) A change, modification, or reconstruction of this facility includes any change in the air pollution control techniques, the addition of add-on control devices, or the construction of duct work for the purpose of controlling both existing tanks and non-affected facilities by a common control technique or device [i.e., the addition of duct work to the CMP system (if a CMP system is used to demonstrate compliance with the chromium emission limitation)].
- (C) A complete application to construct new chromium electroplating or chromium anodizing tanks serves as this notification. Likewise, the complete application to modify or reconstruct tanks DC-1 and DC-2 serves as this notification.
- (D) Pursuant to 326 IAC 2-1.1-2(a), permission must be received from IDEM, OAM before construction, modification, or reconstruction may commence.
- (b) Ongoing Compliance Status Report
  The Permittee shall prepare summary reports to document the ongoing
  compliance status of tanks DC-1 and DC-2 using the Ongoing Compliance Status
  Report form provided with this permit. This report shall contain the information
  specified in 40 CFR 63.347(g)(3).

Because tanks DC-1 and DC-2 are located at site that is an area source of hazardous air pollutants (HAPs), the Ongoing Compliance Status Report shall be retained on site and made available to IDEM, OAM upon request.

- (1) The Ongoing Compliance Status Report shall be complete according to the following schedule except as provided in paragraphs (c)(2).
  - (A) The first report shall cover the period from the start-up date of the emissions units to December 31 of the year in which the emissions units begin operation.
  - (B) Following the first year of reporting, the report shall be completed on a calender year basis with the reporting period covering from January 1 to December 31.
- (2) If either of the following conditions are met, semiannual reports shall be prepared and submitted to IDEM, OAM:
  - (A) The total duration of excess emissions (as indicated by the monitoring data collected by the Permittee in accordance with 40 CFR 63.343(c)) is one percent (1%) or greater of the total operating time as defined in Condition D.1.8(b) for the reporting period; or

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

(B) The total duration of malfunctions of the add-on air pollution control device and monitoring equipment is five percent (5%) of greater of the total operating time as defined in Condition D.1.8(b).

Once the Permittee reports an exceedance as defined above, Ongoing Compliance Status Reports shall be submitted semiannually until a request to reduce reporting frequency in accordance with 40 CFR 63.347(g)(2) is approved.

(3) IDEM, OAM may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.

The following revisions have been made to the Technical Support Document under Permitted Emission Units and Pollution Control Equipment and under Federal Rule Applicability (**bolded** language has been added, the language with a line through it has been deleted). The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

## **Permitted Emission Units and Pollution Control Equipment**

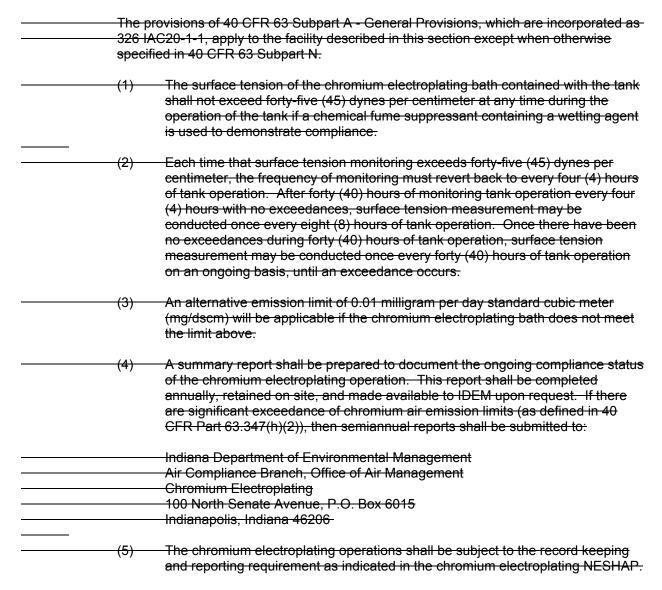
The application includes information relating to the operation of the following equipment:

#### One (1) Decorative Chromium Electroplating Operation consisting of:

- (a) Two (2) decorative chromium electroplating tanks, identified as DC-1 and DC-2, using a hexavalent chromium bath, equipped with a foam blanket suppressant, and exhausting to one (1) stack, identified as SC-1;
- (eb) One (1) natural gas fired boiler identified as Boiler 1, with a maximum heat input rate of 2.65 million (MM) British thermal units (Btu) per hour, and exhausting through stack B-1;
- (dc) One (1) natural gas fired Air Makeup Unit identified as AMU-1, with a maximum heat input rate of 4 MMBtu per hour;
- (ed) One (1) natural gas fired Sludge Dryer identified as SD-1, with a maximum heat input rate of 0.45 MMBtu per hour, and exhausting through stack SD-1; and
- (fe) Four (4) natural gas fired Space Heaters identified as SH-1, SH-2, SH-3 and SH-4, each with a maximum heat input rate of 0.085 MMBtu per hour, and exhausting through stacks SH-1, SH-2, SH-3 and SH-4, respectively.

#### **Federal Rule Applicability**

(b) The chromium electroplating operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:



#### **Federal Rule Applicability**

- (b) Tanks DC-1 and DC-2 are subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:
  - (1) Emission Limitation:

    The permittee shall comply with the requirements of this condition on and after the compliance date for the tanks.
    - (a) During tank operation, the Permittee shall control chromium emissions discharged to the atmoshpere from tanks DC-1 and DC-2 by:

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

- (1) Not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed one-hundredth milligrams of total chromium per dry standard cubic meter of ventilation air (0.01 mg/dscm) [equivalent to four and four-tenths times ten raised to the power of negative six grains of total chromium per dry standard cubic foot of ventilation air (4.4x10-6 gr/dscf)]; or
- (2) Not allowing the foam blanket thickness of the anodizing bath contained within the tank to be less than two and fifty-four hundredths centimeters (2.54 cm) [equivalent to one inch (1 in)] at any time during operation of tanks DC-1 and DC-2 when a foam blanket is used.

## (2) Monitoring Requirements:

The surface tension of the chromium electroplating bath contained with the tank shall not exceed forty-five (45) dynes per centimeter at any time during the operation of the tank if a chemical fume suppressant containing a wetting agent is used to demonstrate compliance.

Each time that surface tension monitoring exceeds forty-five (45) dynes per centimeter, the frequency of monitoring must revert back to every four (4) hours of tank operation. After forty (40) hours of monitoring tank operation every four (4) hours with no exceedances, surface tension measurement may be conducted once every eight (8) hours of tank operation. Once there have been no exceedances during forty (40) hours of tank operation, surface tension measurement may be conducted once every forty (40) hours of tank operation on an ongoing basis, until an exceedance occurs.

An alternative emission limit of 0.01 milligram per dry standard cubic meter (mg/dscm) will be applicable if the chromium electroplating bath does not meet the limit above.

#### (3) Reporting Requirements:

A summary report shall be prepared to document the ongoing compliance status of the chromium electroplating operation. This report shall be completed annually, retained on site, and made available to IDEM upon request. If there are significant exceedance of chromium air emission limits (as defined in 40 CFR Part 63.347(h)(2)), then semiannual reports shall be submitted to:

Indiana Department of Environmental Management Air Compliance Branch, Office of Air Management Chromium Electroplating 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206

Page 17 of 17 MSOP 113-11696-00056

P & J Industries, Inc. Ligonier, Indiana Permit Reviewer: NH/EVP

(4) The chromium electroplating operations shall be subject to the record keeping and reporting requirements as indicated in the chromium electroplating NESHAP.

## Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Company Name: P & J Industries, Inc.

Address City IN Zip: 1492 Gerber Street, Ligonier, IN 46767

CP: 113-11696Plt ID: 113-00056Reviewer: Nishat Hydari

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

7.4 65.2

Facilities	No. of units	MMBtu/hr	Total MMBtu/hr
Boiler 1 (B-1)	1	2.65	2.65
Air Makeup Unit (AMU-1)	1	4	4.00
Sludge Dryer	1	0.45	0.45
Space Heaters 1-4 (SH1-4)	4	0.085	0.34
TOTAL			7.44

#### Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.06	0.25	0.02	3.26	0.18	2.74

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

 $Potential\ Throughput\ (MMCF) = Heat\ Input\ Capacity\ (MMBtu/hr)\ x\ 8,760\ hrs/yr\ x\ 1\ MMCF/1,000\ MMBtu$ 

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32